

GMSA PSE and C&DH Environmental Testing and SmallSat Flatsat Integration

Completed Technology Project (2017 - 2018)



Project Introduction

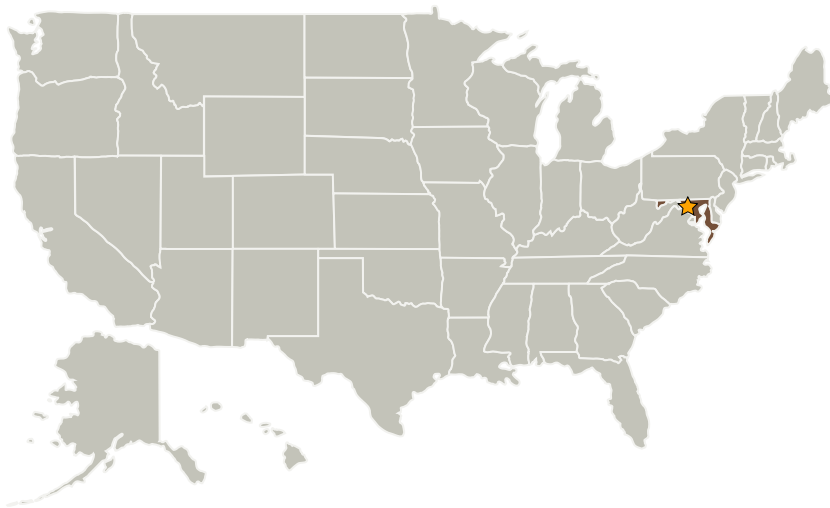
The following goals will be accomplished by the end of fiscal year 2018:

- Complete environmental testing on the GMSA hardware
- Development of FPGA code and software to interface with other peripheral components
- Integration and test of GMSA hardware with other peripheral components

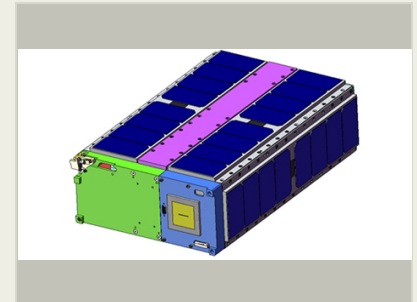
Anticipated Benefits

This effort will be used to demonstrate the functionality of the GMSA hardware in a flight-like environment. In addition, there will also be an opportunity to complete testing and development with other peripheral devices.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Goddard Space Flight Center (GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland



6U SmallSat

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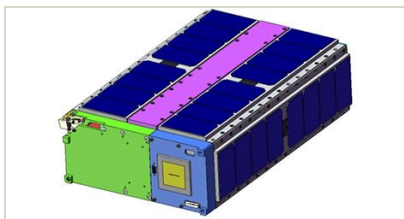
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Primary U.S. Work Locations

Maryland

Images



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(<https://techport.nasa.gov/image/28315>)

Organizational Responsibility

Responsible Mission Directorate:

Mission Support Directorate (MSD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Center Independent Research & Development: GSFC IRAD

Project Management

Program Manager:

Peter M Hughes

Project Managers:

Wesley A Powell

Michael A Johnson

Principal Investigator:

James E Fraction

Co-Investigator:

Hanson C Nguyen

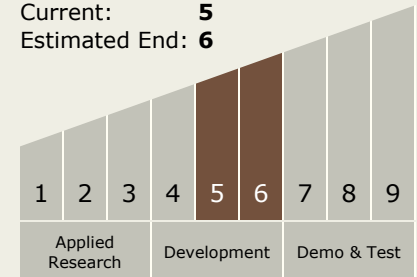
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Technology Maturity (TRL)

Start: **5**
Current: **5**
Estimated End: **6**



Technology Areas

Primary:

- TX11 Software, Modeling, Simulation, and Information Processing
 - └ TX11.1 Software Development, Engineering, and Integrity
 - └ TX11.1.3 Test and Evaluation

Target Destinations

Earth, The Moon, Others Inside the Solar System